

### REMARKS

Claims 164-297 were pending. Applicants have cancelled, without prejudice, claims 164 and 182 and added, without prejudice, claims 298 and 299. With entry of the Supplementary Amendment, claims 165-181 and 183-299 are now pending.

Since two independent claims were cancelled, without prejudice, and two independent claims were added, without prejudice, it is believed that no excess claims fee is due.

# Correcting Recitation of Claimed Subject Matter: Claim 164

In the Response to Office Action Made Final filed April 8, 2005 at page 7 under the heading "Claims 164-181", Applicants stated that "claim 164 recites, in part, a transmitter including a tunable oscillator, a mixer, a phase detector and a local oscillator". This was incorrect since claim 164 actually recites, in part, a transmitter and a local oscillator. The transmitter includes a tunable oscillator, a mixer and a phase detector.

Accordingly, Applicants respectfully request that the official prosecution history reflect the clarification as set forth below. In particular, in the first sentence after the reproduction of claim 164 on page 7 of the Response to Office Action Made Final filed April 8, 2005, Applicants respectfully submit that the sentence should state the following (using standard amendment markings):

Thus, claim 164 recites, in part, a transmitter <u>and a local oscillator</u>. The <u>transmitter includes</u> including a tunable oscillator, a mixer[,] <u>and</u> a phase detector and a local oscillator.



Thus, claim 164 recites, in part, a transmitter and a local oscillator. The transmitter includes a tunable oscillator, a mixer and a phase detector.

In the Appeal Brief filed August 18, 2005 at page 2 in the first paragraph under the heading "SUMMARY OF THE INVENTION", Applicants stated that the "transmitter may include, for example, a tunable oscillator, a mixer, a phase detector and a local oscillator". This was incorrect since claim 164 actually recites, in part, a transmitter and a local oscillator. Claim 164 also recites, in part, that the transmitter includes a tunable oscillator, a mixer and a phase detector

Accordingly, Applicants respectfully request that the official prosecution history reflect the clarification as set forth below. In particular, in the Appeal Brief filed August 18, 2005 at page 2 in the first paragraph under the heading "SUMMARY OF THE INVENTION", Applicants respectfully submit that the paragraph should state the following (using standard amendment markings):

Some embodiments according to some aspects of the present invention may provide a complimentary metal oxide semiconductor (CMOS) integrated circuit that includes, for example, a transmitter and a local oscillator. The transmitter may include, for example, a tunable oscillator, a mixer[,] and a phase detector and a local oscillator. The tunable oscillator may have, for example, a tuning input. The mixer may have, for example, a first input coupled to the oscillator, a second input and an output. The phase detector may have, for example, a first input coupled to the mixer output, a second input and an output coupled to the tuning input. The local oscillator may be coupled to, for example, the second input of the mixer.



Thus, above-referenced CMOS integrated circuit may include, for example, a transmitter and a local oscillator. The transmitter may include, for example, a tunable oscillator, a mixer and a phase detector.

So that there is no ambiguity, Applicants have cancelled, without prejudice, independent claim 164 and replaced it with a new independent claim (i.e., new independent claim 298). Claim 298 recites, in part, a transmitter and a local oscillator. Claim 298 also recites, in part, that the transmitter includes a tunable oscillator, a mixer and a phase detector.

## Correcting Recitation of Claimed Subject Matter: Claim 182

In the Response to Office Action Made Final filed April 8, 2005 at page 9 under the heading "Claims 182-198: Subsampling Mixer", Applicants stated that claim "182 recites, in part, a transmission system comprising a transmitter including a tunable oscillator, a subsampling mixer, a phase detector and a local oscillator" (bold portions in the original omitted). This was incorrect since claim 182 actually recites, in part, a transmitter and a local oscillator. The transmitter includes a tunable oscillator, a subsampling mixer and a phase detector.

Accordingly, Applicants respectfully request that the official prosecution history reflect the clarification as set forth below. In particular, in the first sentence after the heading "Claims 182-198: Subsampling Mixer" on page 9 of the Response to Office Action Made Final filed April 8, 2005, Applicants respectfully submit that the sentence should state the following (using standard amendment markings and omitting the bold portions in the original):



Claim 182 recites, in part, a transmission system comprising a transmitter and a local oscillator. The transmitter includes including a tunable oscillator, a subsampling mixer[,] and a phase detector and a local oscillator.

Thus, claim 182 recites, in part, a transmitter and a local oscillator. The transmitter includes a tunable oscillator, a subsampling mixer and a phase detector.

Furthermore, Applicants respectfully request that the official prosecution history reflect the clarification as set forth below. In particular, in the last paragraph after the heading "<u>Claims 182-198</u>: <u>Subsampling Mixer</u>" on page 9 of the Response to Office Action Made Final filed April 8, 2005, Applicants respectfully submit that the paragraph should state the following (using standard amendment markings and omitting the bold portions in the original):

Applicants respectfully submit that similar arguments as were made with respect to claim 164 concerning a transmitter are made here, if applicable, with respect to claim 182 concerning a transmission system comprising a transmitter. The Final Office Action states that FIGS. 1 and 2 teach such a transmission system. See Final Office Action at page 7. However, this is inaccurate. "FIG. 1 is a block diagram of a single chip receiver in accordance with one embodiment of the invention". Elder at col. 2, lines 3-4. In fact, the title of FIG. 1 is "Fully Integrated CMOS AM Receiver". "FIG. 2 provides additional detail of the LO Sweep Generator 9, 9a Subsystem". Thus, FIG. 2 only provides more detail as to the LO 9 and the LO Sweep Generator 9a of the AM Receiver



illustrated in FIG. 1. Thus, FIGS. 1 and 2 do not teach a transmission system and certainly do not teach a local oscillator and a transmitter in which the transmitter includes with, for example, a tunable oscillator, a subsampling mixer[,] and a phase detector and a local oscillator. In fact, FIGS. 1 and 2 do not illustrate any transmitter components. Instead, FIGS. 1 and 2 illustrate components of an AM receiver. Thus, FIGS. 1 and 2 do not teach a transmission system and certainly do not teach a local oscillator and a transmitter in which the transmitter includes with, for example, a tunable oscillator, a subsampling mixer[,] and a phase detector and a local oscillator. In fact, FIGS. 1 and 2 do not illustrate a transmitter or any components of a transmitter. Thus, the Examiner has failed to provide even a prima facie case of obviousness.

Thus, claim 182 recites, in part, a transmitter and a local oscillator. The transmitter includes a tunable oscillator, a subsampling mixer and a phase detector.

So that there is no ambiguity, Applicants have cancelled, without prejudice, independent claim 182 and replaced it with a new independent claim (i.e., new independent claim 299). Claim 299 recites, in part, a transmitter and a local oscillator. Claim 299 also recites, in part, that the transmitter includes a tunable oscillator, a subsampling mixer and a phase detector.



#### **Examiner Reliance**

If the Examiner previously relied on any of the above-identified statements (or other similar statements) during the prosecution of the present application, then the Examiner is requested to use the opportunity afforded by the Request for Continued Examiner (RCE) filed on January 23, 2007 to re-open prosecution on the merits in view of the corrections, clarifications and/or other remarks made herein with respect to the official prosecution history and in view of the newly added independent claims.

In addition, the Examiner is encouraged to carefully review the recited subject matter as set forth in newly added independent claims 298 and 299 and the remarks herein.

If the Examiner again issues a notice of allowance in view of the newly added independent claims and the remarks herein, then the Examiner cannot be said to have relied on any of the original statements identified herein or other similar statements, since the Examiner will have had ample opportunity with the filing of the RCE on January 23, 2007 to conduct another comprehensive search of the prior art in view of the corrections, clarifications and/or other remarks made herein with respect to the official prosecution history and in view of the newly added independent claims.

# Unreasonable Reliance By Readers of the Prosecution History

To any reader (e.g., a competitor of the assignee, etc.) of the official prosecution history of the present application, it is unreasonable to rely upon the original statements that have been identified herein (or other similar statements) with respect to any recited elements of the claims in view of the corrections, clarifications and/or other remarks made herein with respect to the official prosecution history and in view of the newly added independent claims.



### Conclusion

Applicants look forward to an office action on the merits with respect to claims 165-181 and 183-299 in view of the remarks herein and newly added independent claims 298 and 299.

Since two independent claims were cancelled, without prejudice, and two independent claims were added, without prejudice, it is believed that no excess claims fee is due.

The Commissioner is hereby authorized to charge any additional fees, to charge any fee deficiencies or to credit any overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,

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